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| EXAMINER |
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| ART UNIT | PAPER NUMBER |
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2195

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |  |  |  |
|------------------------------|--|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/602,335     | <b>Applicant(s)</b><br>FORSTALL ET AL. |  |
|                              | <b>Examiner</b><br>Lewis A. Bullock, Jr. | <b>Art Unit</b><br>2195                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4-16,18,19 and 21-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4-16,18,19 and 21-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2, 4-16, 18-20, 24-26, 28-32 and 35-42 are rejected under 35 U.S.C. 102(e) as being anticipated by MOODY (U.S. Patent Publication 2003/0167310 A1).

As to claim 18, MOODY teaches a method for threading e-mail messages, comprising: receiving a first e-mail message (electronic mail) (via a mail agent) (pg. 5-6, para. 0068); receiving a second e-mail message subsequent to the first e-mail message (via determining if the message is a new message or a reply to an existing message) (pg. 6, paragraph 0068); determining that the first e-mail message (electronic mail) is related to a second e-mail message (via determining if the message is a new message or a reply to an existing message) (pg. 6, paragraph 0068); creating an e-mail thread if the second e-mail message is related to the first e-mail message (via generating a shadow document or data structure of the conversational thread, i.e. related e-mails / setting parent child identifiers / conversational thread tree builder) (pg. 6, paragraph 0070-0072; pg.

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8, paragraph 0088); and associating the e-mail thread with the first e-mail message and the second e-mail message (via relating the e-mail messages via the pointers of their shadow documents) (pg. 5-6, paragraph 0068), the e-mail thread including a persistent thread header (data structure / document of the e-mail thread), the thread header having information (meta data) derived from attributes of at least one of the e-mails messages (via associating the e-mail messages and generating a conversational thread document / data structure) (pg. 6, paragraph 0070-0072; pg. 8, paragraph 0088); and displaying thread header information in a user interface wherein the thread header information is displayed in lieu of information for each e-mail message associated with the e-mail thread (wherein a window containing a summary of the electronic mail messages **and/or** all or **part** of the conversation thread tree) (page 7, paragraph 0079).

As to claim 4, MOODY teaches the persistent thread header includes a subject (subject) of the e-mail thread (pg. 5, para. 0066).

As to claim 5, MOODY teaches the persistent thread header includes an originator of the e-mail thread (sender / receiver) (pg. 5, para. 0066).

As to claim 6, MOODY teaches the persistent thread header includes indicia of the number of messages in the thread (via each category having a display count) (pg. 11, para. 0109-0111).

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As to claim 7, MOODY teaches the persistent thread header includes a time that the e-mail thread was most recently updated (via e-mail threads are updated each time a new message is added to the thread and when displaying the timeline the last e-mail message associated with the thread is the most recent update time) (see pg. 5, paragraph 0068; pg. 6, paragraph 0071-0072; pg. 8, paragraph 0088; page 7, paragraph 0077 and 0078 and figure 7).

As to claim 19, MOODY teaches the steps of: receiving a third e-mail message (electronic mail); determining that the third e-mail message is related to the e-mail thread; associating the third e-mail message with the e-mail thread; and updating the persistent thread header to include information derived from attributes of the third e-mail message (wherein the shadow document containing the complete conversation thread may be updated or recomputed each time a new electronic message related to the specific thread is summarized) (pg. 8, paragraph 0088).

As to claim 20, MOODY teaches displaying information from the thread header in a user interface (pg. 7, para. 0077-0079).

As to claim 24, MOODY teaches displaying information from at least one unthreaded e-mail message in the same user interface (via displaying the general folder or general mail) (pg. 11, para. 0109-0111).

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As to claim 25, MOODY teaches displaying an expansion icon associated with the thread header in the user interface (icon buttons) (pg. 11, para. 0109-0111).

As to claim 26, MOODY teaches responsive to a selection of the expansion icon, displaying information about each e-mail message associated with the thread in the user interface (via displaying the icon button of categories and allowing for a selection of the icon button) (pg. 11, para. 0109-0111).

As to claim 28, MOODY teaches e-mail messages associated with the thread are displayed in a common color (via color-coding the subject of a message) (pg. 7, para. 0077-0079).

As to claim 29, MOODY teaches the first e-mail message is related to the second e-mail message if it is a reply to the second e-mail message (pg. 5, para. 0064 – 0067; pg. 5-6, para. 0068; pg. 6, para 0070-0071; pg. 7, para. 0080-0084).

As to claim 30, MOODY teaches the first e-mail message is a reply to the second e-mail message if a In-Reply-To field of a header of the first e-mail message identifies the second e-mail message (pg. 5, para. 0064 – 0067; pg. 5-6, para. 0068; pg. 6, para 0070-0071; pg. 7, para. 0080-0084).

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As to claim 31, MOODY teaches the first e-mail message is related to the second e-mail message if it includes a forward of the second e-mail message (pg. 5, para. 0064 – 0067; pg. 5-6, para. 0068; pg. 6, para 0070-0071; pg. 7, para. 0080-0084).

As to claim 32, MOODY teaches the first e-mail and the second e-mail are stored in different folders of a user's mailbox (different categories) (pg. 11, para. 0108-0111).

As to claims 2, 8-12 and 35, reference is made to a system that corresponds to the method of claims 18, 4-7, and 19 and is therefore met by the rejection of claims 18, 4-7 and 19 above.

As to claims 13-16, 36 and 37, reference is made to a program product that corresponds to the method of claims 18, 4-7 and 19 and is therefore met by the rejection of claims 18, 4-7 and 19 above.

As to claims 38 and 39, reference is made to a system that corresponds to the method of claims 18 and 19 and is therefore met by the rejection of claims 18 and 19 above.

As to claim 40, MOODY teaches a method for threading e-mail messages, comprising: receiving a first e-mail message; receiving a second e-mail message

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that is related to the first e-mail message (via determining if the message is a new message or a reply to an existing message) (pg. 6, paragraph 0068); and threading the first e-mail message and the second e-mail message (via associating the e-mail messages and generating a conversational thread document / data structure) (pg. 6, paragraph 0070-0072; pg. 8, paragraph 0088), the threading including: creating an e-mail thread having a thread header (via associating the e-mail messages and generating a conversational thread document / data structure) (pg. 6, paragraph 0070-0072; pg. 8, paragraph 0088), the thread header having information derived from attributes of at least one of the first or second e-mail messages (page 7, paragraph 0079); and displaying the e-mail thread (wherein a window containing a summary of the electronic mail messages **and/or** all or **part** of the conversation thread tree) (page 7, paragraph 0079).

As to claim 41, MOODY teaches receiving a third e-mail message related to either the first e-mail message or the second e-mail message; and updating the thread including updating the displayed thread header (wherein the shadow document containing the complete conversation thread may be updated or recomputed each time a new electronic message related to the specific thread is summarized) (pg. 8, paragraph 0088).

As to claim 42, MOODY teaches a method for threading e-mail messages, comprising: receiving a first e-mail message; receiving a second e-mail message



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related to the first e-mail message (via determining if the message is a new message or a reply to an existing message) (pg. 6, paragraph 0068); and threading the first e-mail and the second e-mail (via associating the e-mail messages and generating a conversational thread document / data structure) (pg. 6, paragraph 0070-0072; pg. 8, paragraph 0088), the thread including displaying a display item indicating a nature of the relationship between the first e-mail message and the second e-mail message (via displaying a message tree on a timeline wherein the nodes are color-coded to indicate the relationship of the message senders to the recipients) (pg. 7, paragraph 0077).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over MOODY (U.S. Patent Publication 2003/0167310 A1).

As to claims 33 and 34, MOODY substantially discloses the invention above. However, MOODY does not explicitly teach that the different folders are the user's set items folder and personal items folder. MOODY teaches that e-mails are stored in different folders (categories) (pg. 11, para. 0108-0111).

Official Notice is taken in that it is well known in the art that user's sent items and

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personal items folders are well known categories for an e-mail system and therefore would be obvious to one skilled in the art that the e-mail messages of MOODY are stored in the well known folders to associate and categorize e-mail messages.

5. Claims 21-23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over MOODY in view of "Understanding Sequence and Reply Relationships within Email Conversations: A Mixed-Model Visualization" by VENOLIA et al.

As to claims 21-23 and 27, MOODY substantially discloses the invention. However, MOODY does not explicitly teach that the displayed information indicates a color associated with a sender of either e-mail message wherein the header is in the color of the sender of the highest priority.

VENOLIA teaches the displayed information associated with an email conversation wherein the information is displayed in a reduced form (pg. 5, Putting it in Context, right column) wherein a selected message is an initial color and all parents and children are in a different color and ancestors to the root are in a different color (pg. 6, left column, first paragraph) and that the header (summary information about the conversation) indicates information regarding message fields and can be expanded (pg. 6, left column, second paragraph) and also including an unread flag (pg. 6, left column, send paragraph and fourth paragraph). Typically the header indicates the name of the conversational originator (pg. 6, 4<sup>th</sup> paragraph). It would be obvious based upon the teachings

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of VENOLIA that each e-mail message sender is in a different color since they would make up different parents/childs in a email thread and that the e-mail header is in the color of the highest priority e-mail sender, i.e. the initial e-mail sender, since the header indicates the originally sender and he has a color based upon the different colors of the e-mail senders. Therefore, it would be obvious to combine the teachings of MOODY with the teachings of VENOLIA in order to facilitate a mixed-modal visualization that simultaneously presents a sequence and reply relationship among the messages of a conversation (abstract).

### ***Response to Arguments***

6. Applicant's arguments filed March 7, 2006 have been fully considered but they are not persuasive. Applicant argued that Moody does not disclose or suggest determining whether first and second e-mail messages are related before creating an e-mail thread. The examiner disagrees. On page 5, paragraph 0068, Moody teaches the Mail Agent first detects the occurrence of a triggering event which may include the sending or receipt of an electronic message. The mail Agent determines if the electronic message is a new message and to which message the incoming message is a reply. This can be performed by determining if the message has an In-Reply-To header, or whether the subject lines of the message match an existing message or shadow document. If so, the ID files of a shadow document which corresponds to the messages are set accordingly. Moody goes on to state that a conversation thred Tree Builder program can be triggered based upon a request which include

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selection of a specific command within the Notes client application, automatically upon entering the mail function of the Notes client, or upon selection of an electronic message from a mail viewer utility to generate a tree data document of all related messages to a parent message (see page 6, paragraph 0071-0072). Therefore, based upon the teachings provided determining and establishing of a relationship between e-mail messages is first performed before one invokes the Tree Builder program/process to create a uniform data structure of the e-mail messages.

Applicant argues that Moody does not create a thread header including information derived from attributes of at least one of the first or second e-mail messages. The examiner disagrees. The thread header is the single tree document/data structure comprising of data / metadata from the shadow documents / e-mails (see page 6, paragraph 0071-0072; pg. 15, paragraph 014). Therefore, Moody teaches the thread header as disclosed.

Applicant argues that Moody does not displaying thread header information to the user in place of the information for each associated e-mail, but instead presents all of the e-mail messages of the thread to the user instead of any thread header information. The examiner disagrees. First the cited limitation is rejected based upon 35 U.S.C. 112 2<sup>nd</sup> paragraph in that if information from **at least one** e-mail message, e.g. conceivable all e-mail messages, makes up the e-mail header, and the information is attributes associated with the e-mail message then it is impossible to not display information for each e-mail message. For instance if one information of the e-mail message is the subject of the

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message as outlined in dependent claim 4 which when derived from a series of message as a thread header subject line, one cannot both display the subject line of the e-mail header (which is made up of the same subject line as the e-mail message since it is derived from the message) and not display the subject line of the e-mail message. Both subject lines are the same data. The cited limitation is interpreted as displaying parts of the e-mail message and not all information of the e-mail message. On page 7, paragraph 0079, Moody teaches displaying an window containing a summary of the electronic mail messages and/or all or part of the conversation thread tree used herein. Therefore, Moody teaches displaying parts of a conversational thread, i.e. related e-mail messages without displaying the total e-mail message.

Applicant argues that claim 7 details that the thread header includes a time that the e-mail thread was most recently updated and that Moody does not teach such. The examiner disagrees. Moody updates the e-mail thread when a message is received or sent (event) (see pg. 5, paragraph 0068; pg. 6, paragraph 0071-0072; pg. 8, paragraph 0088). Moody also teaches that a thread header / message tree is displayed wherein the e-mail messages are charted in a timeline (see page 7, paragraph 0077 and 0078 and figure 7). Based upon this disclosure, it is inherent that since the time a message tree / header is updated when a message is sent or received and the time line displays messages sent / received at a specified time that the header indicates the most recently updated time via the display of the last message on the timeline.

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Regarding claim 18, refer to the comments above in arguing the displaying of a thread header information in lieu of the information for each e-mail.

In regards to claim 36 and 38, refer to the comments above in arguing the displaying of a thread header information in lieu of the information for each e-mail.

In regards to claims 40-42, refer to the comments above in arguing the displaying of a thread header information in lieu of the information for each e-mail. Moody teaches displaying a relationship between e-mail messages (pg. 7, paragraph 0077).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 25, 2006



LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER